INFORMATION LINK

Information Services Division

Development/Software Services

COMPONENT TECHNOLOGY
Kyle Forster

Components are becoming more prevalent in the software industry. A component is generally a small discrete unit of software that is reusable by many applications. Component based development is the act of building or assembling a new application from reusable components. Each component performs defined services and several components are combined with other components to satisfy the requirements of the application. A component runs within a container such as a Visual Basic or PowerBuilder program or a web browser. The most common components today are OCX/OLE/ActiveX controls such as a spreadsheet or calendar object.

You are probably thinking this is nothing new, but what is new is that components of today are being created based on defined industry standards. Currently, there are several standards for developing components, including COM, CORBA, and Java Beans. The usage of these different standards is dependent on your environment and your security requirements. As applications are deployed to the world wide web, the selection and usage of one or more of these standards has become very important to a successful application.

Information Technology

ARE YOU READY? PROCESS FOR SUBMITTING TECHNOLOGY PLANS
Nancy Walz

Agencies are reminded that the deadline of January 15, 1998 for submitting information technology plans is rapidly approaching. Most agencies have been working hard to meet the deadline. Two agencies have actually submitted completed plans!

The process for submitting and accepting information technology plans will be as follows:

1. The agency should mail two paper copies of the completed plan to:

    > Jim Heck
    > Information Services Division
    > 600 East Boulevard Avenue
    > Bismarck, ND 58505-0100

    A cover letter identifying the agency contact person should be included . This person will be contacted if there are any questions and for future correspondence.

2. If the plan is stored in an electronic format, please copy the files to a diskette and mail the diskette along with the plan. We prefer that the plan is formatted for Microsoft Word or Excel, but we will try to convert other formats.

3. ISD will review the plan for completeness. The agency may be asked to resubmit the plan if additional information is needed or changes are required.

4. Once the plan is accepted by ISD, they will notify the agency in writing and request that the agency send a copy of the accepted plan to John Olsrud at Legislative Council.

If you would like assistance or would like ISD to review your plan prior to formal submission, contact Dennis Klipfel, Nancy Walz, or Jim Heck at 328-3190.

Administrative Services

PRINTING FROM THE MAINFRAME USING TCP/IP
Sam Stoxen

People have changed how they access the ISD mainframe. In the past, we used PC/3270 and Attachmate Extra! over a token ring attachment to do mainframe activities. Today, more agencies are using an Internet aware attachment method of TN3270 using products like Chameleon (now called HostLink) from NetManage or QWS3270 shareware. What they had a problem with was printing from the mainframe to their local printers using those same Internet protocols. About a year ago, Lynette Goroski from ISD found a product on an Internet WWW site called RPM from Brooks Software, INC. This product does the Internet printing to a PC printer using the TCP/IP stack that has been used for mainframe access, Internet mail, or WWW. RPM is relatively inexpensive and works in our environment.

The steps to set it up are as follows:
1. Call the ISD Support Center to have them set up the mainframe side. They will need to know the TCP/IP address of your computer. They will give you a mainframe device for printing and a print queue for identifying it on the PC.

2. Set up RPM on the PC. I used a 30 day trial that I downloaded from the Brooks Software site at http://www.brooksnet.com/. This site offered helpful information on mainframe and AS/400 printing using their products. Remember, the mainframe printing package that we

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are using from LR&S is called VPS/IP.

3. Define a new print queue in RPM.

Some items using underline and bold require you to select options that do the following:
1. Print text, allow font selection, page setup.
2. Use CR to overwrite line.

Many people want to send print in several methods (80 wide portrait, 132 wide portrait, 132 wide landscape or others) to the same printer. This may require having several queues on the mainframe and in RPM.

Chameleon and other programs have an item that allows a different method of printing called TN3270E. TN3270E does not work with the mainframe currently. In the future, this option may be working with the mainframe and may replace some things we are currently doing with printing.

I would like to hear about mainframe printing problems that people are currently having. Send me an email on your successful or failed printing projects.

ADVANTAGES TO COMPLETING YOUR AGENCY'S RECORD DISPOSAL
Becky Lingle

The majority of state agencies receive their annual records disposal reports in January. The following benefits are listed to encourage state agencies to complete their annual disposals in a timely manner.

∗ Increased amount of usable filing space.
∗ Elimination of excess filing equipment.
∗ Legal disposal of expired records.
∗ Compliance with NDCC 54-46-05.
∗ Less time required to search for a specific record.

State agencies disposed of a total of 5258 cubic feet of records for their 1996 disposals. Seventy-two percent of agencies completed their annual records disposal. Look at the benefits to your state agency and complete your records disposal for 1997 today.

Computer Support Services

OS/390... OPERATING SYSTEM UPGRADE
Chuck Schreiber

On December 7, 1997, ISD Tech. Services installed a new release of the OS/390 operating system on the mainframe. This new release brought many new features to the MVS operating system, as it was known as in the past.

OS/390 release 3 is now 100% UNIX compliant, allowing any UNIX application to be ported to the mainframe. This new release also supports object-oriented programming, Distributed Computing Environment (DCE), and multimedia. The mainframe can also serve as a web server.

OS/390 Release 3 also has several new enhancements for systems programmers. Some of these allow us to make more dynamic changes which eliminates the need for us to bring the system down, thus improving system availability.

BETTER SERVICE FROM A ROBOT
Chuck Schrebier

ISD has installed an IBM MagStar 3494 Virtual Tape Server (VTS) in the computer room. This system uses a new cartridge called a 3590 instead of the 3490 cartridges you have seen in the past. There are 2 major differences over the old tape technology. First, while the tapes are exactly the same physical size, they can hold up to 30 times the amount of data as a 3490 tape. Second, the tapes are housed inside a box and pulled from the racks and mounted on the tape drives by a robot.

This increased capacity will allow us to greatly reduce the number of tapes housed at ISD. It is estimated that our current 13,000 tapes will be reduced to less than 1000. To accomplish this, the MagStar VTS utilizes a feature called "volume stacking" in which several smaller tape volumes are "stacked" or stored on one physical 3590 tape.

The robotics will eliminate the human intervention that is currently required to mount a tape. This also means tape

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processing can take place on weekends or when an operator is not present

These enhancements, along with increased data transfer speed, will provide better tape processing services to our customers and at the same time lower people costs and floor space requirements.

Over the next several weeks we will schedule a meeting with agency coordinators and set up a conversion schedule. The plan is to review your tape processing, retention, and off-site storage schedules. If you have any questions, call Chuck Schreiber at 328-3616.

MICROSOFT OFFICE
Esther Norgard

Word8: Format Sniffer
In Word8 (97), there is a trick to seeing information on the screen regarding character and paragraph attributes. The "Format Sniffer" allows a user to click on a piece of text and read in a callout box information regarding paragraph and font formatting.

If there is a button called "Context Sensitive Help" on a toolbar, click it and then click in the text you want to see formatting information. Pressing Escape or clicking the button again will deactivate the Sniffer feature. If the button does not appear on a toolbar and you want to add it, right click a toolbar and select Customize. Click the Commands tab. From the categories list, choose Window and Help. From the commands list, choose What's This? and drag it onto any toolbar. Click Close.

Word8: Calendar Wizard
There's an add-in feature that is downloadable from Microsoft's website to create monthly calendars. It's fully customizable, allowing you to change the appearance of the calendar itself, insert pictures, and type your appointments in your choice of fonts and sizes. It's called Time Management Wizard and can be found at http://www.microsoft.com/officefreestuff/word. When the files are automatically placed in Word's Template directory, they are available like any other template by going to the File menu and

choosing New. The wizard walks you through a few questions, and then you have a calendar.

MSMail: Email Attachments
If someone sends a file as an email attachment and the file has an extension not recognized by Word, double clicking it can result in errors rather than opening the document. An easy alternative to associating the file with Word is simply to select "Save Attachment" from the File menu in MSMail. Choose a directory, give the file any name you want, and open it from within Word.

MICROSOFT "INTERNET MAIL AND NEWS" TIPS
Gary J. Vetter

If you are using Microsoft's "Internet Mail and News" program that comes bundled with Internet Explorer v3.x, it is probably eating up large amounts of space on your hard-drive! Messages that are deleted from the program are *not* automatically removed from your PC. To recover this wasted space, select "File" from the menu bar, click on "Folder" in the pull-down window, choose "Compact," and then "All Folders." For curiosity's sake, you might want to note the size of the "*.mbx" files on your hard-drive before and after this process.

Some other tips that will help conserve disk space:

➲ By default, *all* outgoing messages are stored in the "Sent Items" folder. To disable this feature, select "Mail" from the menu bar and then click on "Options" in the pull-down window. Under the "Send" tab of the "Options" window, remove the check mark by "Save copy of sent messages in the 'Sent Items' folder."

➲ By default, deleted messages are not automatically removed from the "Deleted Items" folder when you exit the program. To enable this feature, select "Mail" from the menu bar and then click on "Options" in the pull-down window. Under the "Read" tab of the "Options" window, place a check mark by "Empty messages from the 'Deleted Items' folder on exit."

Telecommunication Services

SCHEDULED CHANGES ON ISD HOMEPAGE
Cindy Kemmet

As a reminder to all our customers, ISD is placing all **service affecting enhancements or work projects** that may affect your service on our WWW home page. From our home page at **http//:www.state.nd.us/isd**, you simply choose 'Schedule of Changes' and you will be presented with a view of all future Scheduled Changes arranged by date. If you wish to see past Scheduled Changes, simply change the 'date' and click on go. We try to post the Scheduled Changes with as much advance notice as possible. There are usually new changes posted on this web page daily. Since it's implementation 4 months ago, we have posted over 125 changes. If you have questions about any of the changes or their impact on your agency, please contact the ISD Support Center at 701-328-4470 and we will check into it for you.

PUBLIC PAY TELEPHONES
Marv Fettig

You may have noticed telephone installers working on the pay telephones around the Capitol within the last month. US West is in the process of selling their pay phone business in their 14 state territory. Bismarck is one of the areas they have recently sold.

The company that purchased the US West pay phone business in Bismarck, which includes the State Capitol and other state office buildings, is Advanced Telecom Integrations Inc. (ATI) from Jacksonville, Texas. ISD has inventoried and updated all of the pay phone records in Bismarck and has signed a new service contract with ATI, Inc.

The pay telephones have been labeled with the new ATI logo. Charges for local calls will remain the same, however, there is a slight change in the cost of long distance calls (example .25/minute anywhere in the U.S. with a minimum of 4 minutes). Another change you will see in the 20 pay telephones within the Capitol complex is that not all of the pay phones will be available for use during non- Legislative time frames. During the Legislative session, all 20 of the Capitol complex pay telephones will have a dial tone and will be working. During the months between Legislative sessions, ATI, Inc. and ISD will put some of the pay telephones on what is called 'vacation' status. In areas where there are several pay phones, one pay telephone will be working and the others will be on 'vacation' until the next Legislative session. In order to avoid confusion, all pay telephones that have been placed on 'vacation' will be labeled with proper signs.

Past records indicate that there is very little use of the Capitol pay telephones during the non-Legislative time frames and that reducing the number of the telephones will not affect service. This new arrangement will provide adequate service to all employees and visitors in the Capitol building and the entire Capitol complex.

This arrangement also enables the pay telephone vender to reduce their overall costs and allows ISD to keep all current pay telephones intact. Non-profitable pay telephones will not be removed.

The selling of pay telephones is occurring in other cities in North Dakota as well. ATI, Inc. has purchased telephones in the US West territory and another company, PhoneTel Technologies, Inc., has purchased pay telephones in non-US West areas including Souris River Telephone in Minot, Reservation Telephone Cooperative in Parshall, and Consolidated Telephone Cooperative in Dickinson. ISD has also been working with PhoneTel to secure contracts in those areas.

This is a "sign of the times" in the pay telephone industry and ISD will attempt to adjust to it as well as possible, keeping the best interest of the state in mind as we proceed in this new venture.

ISD EMPLOYEE PROFILE

Name: Norma Schacher

Job Title: Customer Technical Support Specialist III

Job Responsibilities: I am responsible to take trouble calls and try to solve the problems. If I can't solve the problem, I see to it that the problem gets logged in to the Heat System to someone that can help. Other responsibilities include directing calls in the right direction, resetting user id's and passwords, recycling some terminal id's, and starting printers.

Years of Service: 21

Educational Background: High school graduate. Completed many courses on pc applications, technical training, seminars, and lectures.

Who do you consider to be your customer? Other state agencies, county and local government agencies, Higher Education, and private business in and outside of the state of North Dakota.